

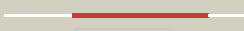










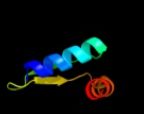













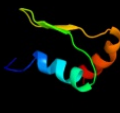

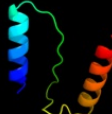



# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P09391
Date	Thu Jan 5 11:02:20 GMT 2012
Unique Job ID	4edf742f2c378ddc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d3b45a1</a>	 Alignment		100.0	100	<b>Fold:</b> Rhomboid-like <b>Superfamily:</b> Rhomboid-like <b>Family:</b> Rhomboid-like
2	<a href="#">d2nr9a1</a>	 Alignment		100.0	36	<b>Fold:</b> Rhomboid-like <b>Superfamily:</b> Rhomboid-like <b>Family:</b> Rhomboid-like
3	<a href="#">c2gqcA_</a>	 Alignment		98.6	25	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> rhomboid intramembrane protease; <b>PDBTitle:</b> solution structure of the n-terminal domain of rhomboid intramembrane2 protease from p. aeruginosa
4	<a href="#">d1utaa_</a>	 Alignment		93.9	19	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Sporulation related repeat <b>Family:</b> Sporulation related repeat
5	<a href="#">c1x60A_</a>	 Alignment		93.5	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> sporulation-specific n-acetylmuramoyl-l-alanine <b>PDBTitle:</b> solution structure of the peptidoglycan binding domain of 2 b. subtilis cell wall lytic enzyme cwlc
6	<a href="#">c2y9jt_</a>	 Alignment		93.5	4	<b>PDB header:</b> protein transport <b>Chain:</b> T: <b>PDB Molecule:</b> protein prgh; <b>PDBTitle:</b> three-dimensional model of salmonella's needle complex at2 subnanometer resolution
7	<a href="#">c1vj7A_</a>	 Alignment		92.7	9	<b>PDB header:</b> protein transport <b>Chain:</b> A: <b>PDB Molecule:</b> escj; <b>PDBTitle:</b> crystal structure of enteropathogenic e.coli (epec) type iii secretion2 system protein escj
8	<a href="#">d1zhva2</a>	 Alignment		60.8	16	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Atu0741-like
9	<a href="#">c2hfvA_</a>	 Alignment		53.8	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein rpa1041; <b>PDBTitle:</b> solution nmr structure of protein rpa1041 from pseudomonas2 aeruginosa. northeast structural genomics consortium3 target pat90.
10	<a href="#">d1zvpa2</a>	 Alignment		51.5	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> VC0802-like
11	<a href="#">d2hmfa2</a>	 Alignment		44.3	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Aspartokinase allosteric domain-like

12	<a href="#">d2hfva1</a>	Alignment		37.7	15	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> GlnB-like <b>Family:</b> RPA1041-like
13	<a href="#">c1zvpB_</a>	Alignment		30.6	18	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> hypothetical protein vc0802; <b>PDBTitle:</b> crystal structure of a protein of unknown function vc0802 from vibrio2 cholerae, possible transport protein
14	<a href="#">d2bgra2</a>	Alignment		29.2	10	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> DPP6 catalytic domain-like
15	<a href="#">c3jw8A_</a>	Alignment		28.1	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> mgII protein; <b>PDBTitle:</b> crystal structure of human mono-glyceride lipase
16	<a href="#">c3hjuB_</a>	Alignment		27.5	12	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> monoglyceride lipase; <b>PDBTitle:</b> crystal structure of human monoglyceride lipase
17	<a href="#">c1zhvA_</a>	Alignment		23.8	17	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein atu0741; <b>PDBTitle:</b> x-ray crystal structure protein atu0741 from agobacterium tumefaciens.2 northeast structural genomics consortium target atr8.
18	<a href="#">c2v1nA_</a>	Alignment		22.7	11	<b>PDB header:</b> nuclear protein <b>Chain:</b> A: <b>PDB Molecule:</b> protein kin homolog; <b>PDBTitle:</b> solution structure of the region 51-160 of human kin172 reveals a winged helix fold
19	<a href="#">d1orva2</a>	Alignment		22.4	12	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> DPP6 catalytic domain-like
20	<a href="#">c3l76B_</a>	Alignment		19.8	25	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> aspartokinase; <b>PDBTitle:</b> crystal structure of aspartate kinase from synechocystis
21	<a href="#">c2wirB_</a>	Alignment	not modelled	19.2	9	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> alpha/beta hydrolase fold-3 domain protein; <b>PDBTitle:</b> hyperthermophilic esterase from the archeon pyrobaculum2 calidifontis
22	<a href="#">d1u4na_</a>	Alignment	not modelled	19.2	15	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> Carboxylesterase
23	<a href="#">c2dtjA_</a>	Alignment	not modelled	18.2	16	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> aspartokinase; <b>PDBTitle:</b> crystal structure of regulatory subunit of aspartate kinase2 from corynebacterium glutamicum
24	<a href="#">c3qwuA_</a>	Alignment	not modelled	17.6	10	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> dna ligase; <b>PDBTitle:</b> putative atp-dependent dna ligase from aquifex aeolicus.
25	<a href="#">d2cdqa3</a>	Alignment	not modelled	15.8	19	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Aspartokinase allosteric domain-like
26	<a href="#">d1sbpa_</a>	Alignment	not modelled	15.1	27	<b>Fold:</b> Periplasmic binding protein-like II <b>Superfamily:</b> Periplasmic binding protein-like II <b>Family:</b> Phosphate binding protein-like
27	<a href="#">c3d7rB_</a>	Alignment	not modelled	14.9	8	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> esterase; <b>PDBTitle:</b> crystal structure of a putative esterase from staphylococcus aureus
28	<a href="#">d1xfda2</a>	Alignment	not modelled	14.2	6	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> DPP6 catalytic domain-like
						<b>PDB header:</b> oxidoreductase

29	<a href="#">c1yq3C_</a>	Alignment	not modelled	12.8	10	<b>Chain:</b> C: <b>PDB Molecule:</b> succinate dehydrogenase cytochrome b, large subunit; <b>PDBTitle:</b> avian respiratory complex ii with oxaloacetate and ubiquinone
30	<a href="#">c2voyG_</a>	Alignment	not modelled	12.4	23	<b>PDB header:</b> hydrolase <b>Chain:</b> G: <b>PDB Molecule:</b> sarcoplasmic/endoplasmic reticulum calcium <b>PDBTitle:</b> cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus
31	<a href="#">d2hu7a2</a>	Alignment	not modelled	12.0	8	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> Acylamino-acid-releasing enzyme, C-terminal donain
32	<a href="#">c3aikB_</a>	Alignment	not modelled	11.2	12	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> 303aa long hypothetical esterase; <b>PDBTitle:</b> crystal structure of a hsl-like carboxylesterase from sulfobobus2 tokodaii
33	<a href="#">d2boaa2</a>	Alignment	not modelled	11.1	22	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Pancreatic carboxypeptidase, activation domain
34	<a href="#">c3gr0D_</a>	Alignment	not modelled	10.7	11	<b>PDB header:</b> membrane protein <b>Chain:</b> D: <b>PDB Molecule:</b> protein prgh; <b>PDBTitle:</b> periplasmic domain of the t3ss inner membrane protein prgh from2 s.typhimurium (fragment 170-362)
35	<a href="#">d1jqga2</a>	Alignment	not modelled	10.6	12	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Pancreatic carboxypeptidase, activation domain
36	<a href="#">c2re1A_</a>	Alignment	not modelled	10.0	22	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> aspartokinase, alpha and beta subunits; <b>PDBTitle:</b> crystal structure of aspartokinase alpha and beta subunits
37	<a href="#">c1nauA_</a>	Alignment	not modelled	8.8	36	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> glucagon; <b>PDBTitle:</b> nmr solution structure of the glucagon antagonist [deshis1,2 desphe6, glu9]glucagon amide in the presence of3 perdeuterated dodecylphosphocholine micelles
38	<a href="#">d1tc3c_</a>	Alignment	not modelled	8.5	27	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Recombinase DNA-binding domain
39	<a href="#">c3fakA_</a>	Alignment	not modelled	8.2	8	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> esterase/lipase; <b>PDBTitle:</b> structural and functional analysis of a hormone-sensitive2 lipase like este5 from a metagenome library
40	<a href="#">c2ecfA_</a>	Alignment	not modelled	8.1	10	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> dipeptidyl peptidase iv; <b>PDBTitle:</b> crystal structure of dipeptidyl aminopeptidase iv from2 stenotrophomonas maltophilia
41	<a href="#">c3ga7A_</a>	Alignment	not modelled	7.7	9	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> acetyl esterase; <b>PDBTitle:</b> 1.55 angstrom crystal structure of an acetyl esterase from salmonella2 typhimurium
42	<a href="#">d1udxa3</a>	Alignment	not modelled	7.6	20	<b>Fold:</b> Obg GTP-binding protein C-terminal domain <b>Superfamily:</b> Obg GTP-binding protein C-terminal domain <b>Family:</b> Obg GTP-binding protein C-terminal domain
43	<a href="#">d1o6xa_</a>	Alignment	not modelled	7.5	21	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Pancreatic carboxypeptidase, activation domain
44	<a href="#">c2k9yB_</a>	Alignment	not modelled	7.2	40	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> ephrin type-a receptor 2; <b>PDBTitle:</b> epha2 dimeric structure in the lipidic bicelle at ph 5.0
45	<a href="#">c2k9yA_</a>	Alignment	not modelled	7.2	40	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> ephrin type-a receptor 2; <b>PDBTitle:</b> epha2 dimeric structure in the lipidic bicelle at ph 5.0
46	<a href="#">c1bh0A_</a>	Alignment	not modelled	6.4	33	<b>PDB header:</b> synthetic hormone <b>Chain:</b> A: <b>PDB Molecule:</b> glucagon; <b>PDBTitle:</b> structure of a glucagon analog
47	<a href="#">c1jrjA_</a>	Alignment	not modelled	6.2	7	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> exendin-4; <b>PDBTitle:</b> solution structure of exendin-4 in 30-vol% trifluoroethanol
48	<a href="#">d1h97a_</a>	Alignment	not modelled	6.2	5	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
49	<a href="#">d2hmfa3</a>	Alignment	not modelled	5.8	10	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Aspartokinase allosteric domain-like
50	<a href="#">d2c0ra1</a>	Alignment	not modelled	5.6	12	<b>Fold:</b> PLP-dependent transferase-like <b>Superfamily:</b> PLP-dependent transferases <b>Family:</b> GABA-aminotransferase-like
51	<a href="#">d1lzla_</a>	Alignment	not modelled	5.6	15	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> Carboxylesterase
52	<a href="#">c1d0rA_</a>	Alignment	not modelled	5.4	17	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> glucagon-like peptide-1-(7-36)-amide; <b>PDBTitle:</b> solution structure of glucagon-like peptide-1-(7-36)-amide2 in trifluoroethanol/water
53	<a href="#">c2zhoB_</a>	Alignment	not modelled	5.3	13	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> aspartokinase; <b>PDBTitle:</b> crystal structure of the regulatory subunit of aspartate2 kinase from thermus thermophilus (ligand free form)
54	<a href="#">c3ofeB_</a>	Alignment	not modelled	5.3	18	<b>PDB header:</b> chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> ldlr chaperone boca; <b>PDBTitle:</b> structured domain of drosophila melanogaster boca p41 2 2 crystal form